

In the Claims

Please cancel claim 13.

1. (Previously Present) A process for the production of low-viscosity water-soluble cellulose ethers by oxidative decomposition of higher-viscosity cellulose ethers with hydrogen peroxide, comprising:

- (a) forming, under conditions of intensive mixing and at temperatures of 65 - 125°C, a mixture comprising, (i) higher-viscosity cellulose ethers, and (ii) an aqueous solution of hydrogen peroxide which is present in an amount of 0.5 to 1.8 wt.% in relation to the dry cellulose ether, the solid content of the mixture is no lower than 25 wt.% in relation to the total quantity of the mixture; and
- (b) agitating continuously the mixture of step (a) at temperatures of 65 - 125°C until approximately at least 90% of the hydrogen peroxide has been spent,

wherein during or after the decomposition reaction, the pH value of the mixture of step (a) is set at more than 4.5, by adding to said mixture a second aqueous solution which has a pH of 5 to 12, provided that when said second aqueous solution is added during the decomposition reaction said second aqueous solution may optionally contain, in solution, the hydrogen peroxide required for the decomposition reaction.

2. (Previously Presented) The process of Claim 1 wherein said mixture of step (a) is formed by adding aqueous hydrogen peroxide in portions.

3-4. (Cancelled)

5. (Twice Amended, Clean) The process of Claim 1 wherein a higher-viscosity cellulose ether having a dry cellulose ether content of 35 - 80 wt.%, in relation to the total quantity of cellulose ether and solvent, is used.

6. (Cancelled)

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7. (Original) Process for the production of low-viscosity water-soluble cellulose ethers according to any one of claims 1 to 6, characterised in that the water soluble cellulose ether is carboxymethyl cellulose, hydrophobically modified carboxymethyl cellulose, hydroxyethyl carboxymethyl cellulose, sulfoethyl cellulose, hydrophobically modified sulfoethyl cellulose, hydroxyethyl sulfoethyl cellulose, hydrophobically modified hydroxyethyl sulfoethyl cellulose, hydroxyethyl cellulose, hydrophobically modified hydroxyethyl cellulose, methyl cellulose, methylhydroxyethyl cellulose, methylhydroxyethyl sulfoethyl cellulose, hydrophobically modified methylhydroxyethyl cellulose, methylhydroxypropyl cellulose, hydroxypropyl cellulose or mixtures thereof.

8. (Original) Process for the production of low-viscosity water-soluble cellulose ethers according to any one of claims 1 to 7, characterised in that the water-soluble cellulose ether is methylcellulose, methyl hydroxyethyl cellulose, hydrophobically modified methyl hydroxyethyl cellulose, methyl hydroxypropyl cellulose, hydroxypropyl cellulose or mixtures thereof and water-wet filter cakes of these cellulose ethers, as obtained after washing and separation, are used.

9. (Original) Process for the production of low-viscosity water-soluble cellulose ethers according to any one of claims 1 to 7, characterised in that the water soluble cellulose ether is methyl hydroxyethyl cellulose or methyl hydroxypropyl cellulose and water-wet filter cakes of the cellulose ethers, as obtained after washing and separation, are used.

10-11. (Cancelled)

12. (Previously Amended) The process of Claim 1 wherein a higher-viscosity cellulose ether having a dry cellulose ether content of 40 to 55 wt. %, in relation to the total quantity of cellulose ether and solvent, is used.

13. (Cancelled)

14. (Previously Presented) The process of Claim 1 wherein the pH value of the mixture of step (a) is set at 6 to 7.

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15. (Previously Presented) The process of Claim 1 wherein said second aqueous solution comprises a member selected from the group consisting of sodium dihydrogen phosphate, sodium hydrogen phosphate, sodium phosphate, sodium carbonate, sodium hydrogen carbonate, alkali salts of citric acid, alkali salts of succinic acid and combinations thereof.